



# SEQUENCE LISTING

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<140> 10/808,052

<141> 2004-03-24

<150> 60/457,048

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<170> PatentIn Ver. 2.1

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Gly Asp Pro Val Ser Val Val Lys Gly Leu Ile Leu Leu Ile Asp His 725 730 735		
Ser Gln Asp Ile Gln Leu Gln Ser Gly Leu Lys Ala Asn Met Glu Ile 740 745 750		
Gln Gly Gly Leu Ala Ile Asp Ile Ser Gly Ser Met Glu Phe Ser Leu 755 760 765		
Trp Tyr Arg Glu Ser Lys Thr Arg Val Lys Asn Arg Val Ala Val Val 770 775 780		
Ile Thr Ser Asp Val Thr Val Asp Ala Ser Phe Val Lys Ala Gly Leu 785 790 795 800		
Glu Ser Arg Ala Glu Thr Glu Ala Gly Leu Glu Phe Ile Ser Thr Val 805 810 815		
Gln Phe Ser Gln Tyr Pro Phe Leu Val Cys Met Gln Met Asp Lys Ala 820 825 830		
Glu Ala Pro Leu Arg Gln Phe Glu Thr Lys Tyr Glu Arg Leu Ser Thr		

835	840	845
Gly Arg Gly Tyr Val Ser Arg Arg Arg Lys Glu Ser Leu Val Ala Gly		
850	855	860
Cys Glu Leu Pro Leu His Gln Gln Asn Ser Glu Met Cys Asn Val Val		
865	870	875
Phe Pro Pro Gln Pro Glu Ser Asp Asn Ser Gly Gly Trp Phe		
885	890	

<210> 7  
 <211> 21  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence:oligonucleotide  
 primer

<400> 7  
 ggagaaacgg tcataattgt g 21

<210> 8  
 <211> 21  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence:oligonucleotide  
 primer

<400> 8  
 gtgggccgct ctaggcacca a 21

<210> 9  
 <211> 24  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence:oligonucleotide  
 primer

<400> 9  
 ctctttgatg tcacgcacga tttc 24

<210> 10  
 <211> 25  
 <212> DNA  
 <213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:oligonucleotide  
primer

<400> 10

ggacttttttg gatttcaaaa gtgac

25

<210> 11

<211> 265

<212> PRT

<213> Homo sapiens

<220>

<221> VARIANT

<222> (1)..(261)

<223> Wherein Xaa is any amino acid.

<400> 11

Met Asp Pro Pro Arg Pro Ala Leu Leu Ala Leu Leu Ala Xaa Pro Xaa  
1 5 10 15

Leu Leu Leu Leu Leu Leu Ala Gly Ala Arg Xaa Glu Glu Glu Xaa Leu  
20 25 30

Glu Asn Val Xaa Leu Val Cys Pro Lys Asp Xaa Thr Arg Phe Xaa His  
35 40 45

Leu Xaa Lys Xaa Xaa Thr Tyr Asn Tyr Glu Ala Glu Ser Ser Ser Gly  
50 55 60

Val Pro Gly Thr Ala Xaa Ser Arg Ser Ala Thr Arg Xaa Asn Cys Lys  
65 70 75 80

Xaa Glu Leu Glu Val Pro Gln Leu Cys Ser Phe Ile Leu Lys Xaa Ser  
85 90 95

Gln Cys Thr Leu Lys Glu Val Tyr Gly Phe Asn Pro Glu Gly Lys Ala  
100 105 110

Leu Leu Lys Lys Thr Lys Asn Ser Xaa Glu Xaa Ala Ala Ala Met Ser  
115 120 125

Arg Xaa Glu Leu Lys Leu Ala Ile Pro Glu Gly Lys Gln Val Phe Leu  
130 135 140

Tyr Pro Glu Lys Asp Glu Pro Thr Tyr Ile Leu Asn Ile Lys Arg Gly  
145 150 155 160

Ile Ile Ser Ala Leu Leu Val Pro Pro Glu Xaa Glu Glu Ala Lys Gln  
165 170 175

Xaa Leu Phe Xaa Asp Thr Val Tyr Gly Asn Cys Ser Thr His Phe Thr  
180 185 190

Val Lys Thr Arg Xaa Gly Asn Xaa Ala Thr Xaa Xaa Ser Thr Glu Arg  
195 200 205

Asp Leu Gly Gln Cys Asp Arg Phe Lys Pro Ile Arg Thr Gly Ile Ser  
 210 215 220  
 Pro Xaa Ala Leu Ile Lys Gly Met Xaa Arg Pro Leu Ser Thr Leu Ile  
 225 230 235 240  
 Xaa Ser Xaa Gln Ser Cys Gln Xaa Thr Leu Asp Ala Lys Arg Lys His  
 245 250 255  
 Val Ala Glu Ala Xaa Cys Lys Glu Gln  
 260 265

<210> 12  
 <211> 335  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> VARIANT  
 <222> (1)..(335)  
 <223> Wherein Xaa is any amino acid.

<400> 12  
 Met Gly Cys Leu Leu Phe Leu Leu Leu Trp Ala Leu Leu Gln Ala Trp  
 1 5 10 15  
 Gly Ser Ala Glu Val Pro Gln Arg Leu Phe Pro Leu Arg Cys Leu Gln  
 20 25 30  
 Ile Ser Ser Phe Ala Asn Ser Ser Trp Thr Arg Thr Asp Gly Leu Ala  
 35 40 45  
 Trp Leu Gly Glu Leu Gln Thr His Xaa Trp Ser Asn Asp Ser Asp Thr  
 50 55 60  
 Val Arg Xaa Xaa Lys Pro Trp Ser Gln Gly Thr Phe Ser Asp Gln Gln  
 65 70 75 80  
 Trp Glu Thr Leu Gln His Ile Phe Arg Val Tyr Arg Ser Ser Phe Thr  
 85 90 95  
 Xaa Asp Xaa Lys Glu Xaa Ala Lys Xaa Xaa Arg Leu Ser Tyr Pro Leu  
 100 105 110  
 Glu Leu Gln Xaa Ser Ala Gly Cys Glu Xaa His Pro Gly Asn Ala Ser  
 115 120 125  
 Asn Asn Phe Phe His Val Ala Phe Gln Gly Lys Asp Ile Leu Ser Phe  
 130 135 140  
 Gln Gly Thr Ser Xaa Glu Pro Xaa Gln Glu Ala Pro Xaa Trp Val Asn  
 145 150 155 160  
 Leu Ala Xaa Gln Xaa Leu Asn Gln Asp Lys Trp Thr Xaa Glu Thr Xaa  
 165 170 175

Gln Trp Leu Leu Asn Gly Thr Cys Pro Gln Phe Val Ser Gly Leu Leu  
 180 185 190  
 Glu Ser Gly Lys Ser Glu Leu Lys Lys Gln Val Lys Pro Lys Xaa Trp  
 195 200 205  
 Leu Ser Arg Gly Pro Xaa Pro Xaa Pro Gly Arg Leu Leu Leu Xaa Cys  
 210 215 220  
 His Val Ser Gly Xaa Tyr Pro Lys Pro Val Trp Val Lys Trp Xaa Xaa  
 225 230 235 240  
 Gly Glu Gln Glu Gln Gln Gly Thr Gln Pro Xaa Asp Xaa Xaa Pro Asn  
 245 250 255  
 Xaa Asp Glu Thr Trp Tyr Leu Arg Ala Thr Leu Xaa Val Xaa Ala Gly  
 260 265 270  
 Glu Ala Xaa Gly Leu Ser Cys Arg Val Lys His Ser Ser Leu Xaa Gly  
 275 280 285  
 Gln Asp Ile Val Leu Tyr Trp Gly Gly Ser Tyr Thr Ser Met Gly Leu  
 290 295 300  
 Ile Ala Leu Ala Val Leu Ala Cys Leu Leu Phe Leu Leu Ile Val Gly  
 305 310 315 320  
 Phe Thr Ser Arg Phe Lys Arg Gln Thr Ser Tyr Gln Gly Val Leu  
 325 330 335

<210> 13

<211> 210

<212> PRT

<213> Homo sapiens

<220>

<221> VARIANT

<222> (1)..(210)

<223> Wherein Xaa is any amino acid.

<400> 13

Lys Cys Val Gln Ser Xaa Lys Pro Ser Leu Met Ile Gln Lys Ala Xaa  
 1 5 10 15  
 Xaa Gln Ala Leu Arg Lys Met Glu Pro Lys Asp Lys Asp Gln Glu Val  
 20 25 30  
 Leu Leu Gln Thr Phe Leu Asp Asp Ala Ser Pro Gly Asp Xaa Arg Xaa  
 35 40 45  
 Ala Ala Xaa Leu Met Xaa Xaa Arg Ser Pro Ser Gln Ala Asp Xaa Asn  
 50 55 60  
 Lys Ile Val Gln Xaa Leu Pro Trp Glu Gln Asn Glu Gln Val Lys Asn  
 65 70 75 80

Xaa Val Ala Xaa His Ile Ala Asn Xaa Leu Asn Ser Glu Glu Xaa Asp  
                                     85                                    90                                    95  
 Xaa Gln Asp Leu Lys Lys Leu Val Xaa Glu Ala Xaa Lys Glu Ser Gln  
                                     100                                    105                                    110  
 Leu Pro Thr Val Met Asp Phe Arg Lys Phe Ser Arg Asn Tyr Gln Leu  
                                     115                                    120                                    125  
 Tyr Lys Ser Val Xaa Leu Pro Ser Leu Asp Pro Xaa Ser Xaa Lys Ile  
                                     130                                    135                                    140  
 Glu Gly Asn Leu Xaa Phe Asp Pro Asn Asn Xaa Leu Pro Lys Glu Ser  
                                     145                                    150                                    155                                    160  
 Met Xaa Xaa Thr Thr Leu Thr Ala Phe Gly Phe Ala Ser Xaa Asp Xaa  
                                     165                                    170                                    175  
 Xaa Glu Ile Xaa Leu Glu Gly Lys Gly Phe Glu Pro Thr Leu Xaa Ala  
                                     180                                    185                                    190  
 Xaa Phe Gly Lys Gln Xaa Phe Phe Pro Xaa Ser Val Asn Lys Ala Leu  
                                     195                                    200                                    205  
 Tyr Trp  
                                     210

<210> 14  
 <211> 301  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> VARIANT  
 <222> (1)..(301)  
 <223> Wherein Xaa is any amino acid.

<400> 14  
 Phe Ser Tyr Asn Asn Lys Tyr Gly Met Val Ala Gln Val Thr Gln Thr  
                                     1                                    5                                    10                                    15  
 Leu Lys Leu Glu Asp Thr Pro Lys Ile Asn Ser Arg Phe Phe Gly Glu  
                                     20                                    25                                    30  
 Gly Thr Xaa Lys Met Gly Leu Ala Xaa Glu Ser Thr Lys Ser Thr Ser  
                                     35                                    40                                    45  
 Pro Pro Lys Xaa Ala Glu Ala Val Xaa Xaa Xaa Leu Gln Glu Leu Lys  
                                     50                                    55                                    60  
 Lys Leu Thr Ile Ser Xaa Gln Xaa Ile Gln Arg Ala Xaa Leu Phe Asn  
                                     65                                    70                                    75                                    80  
 Xaa Xaa Val Thr Glu Leu Arg Gly Leu Ser Asp Glu Ala Val Thr Ser  
                                     85                                    90                                    95

Xaa Leu Pro Gln Leu Ile Glu Xaa Ser Ser Pro Xaa Xaa Leu Gln Ala  
100 105 110  
Leu Val Gln Cys Gly Xaa Pro Gln Cys Ser Thr His Ile Xaa Gln Xaa  
115 120 125  
Leu Lys Xaa Val His Ala Asn Pro Leu Leu Ile Asp Val Val Thr Tyr  
130 135 140  
Leu Val Ala Leu Xaa Pro Glu Pro Ser Ala Gln Gln Xaa Arg Glu Ile  
145 150 155 160  
Phe Asn Met Ala Arg Xaa Gln Arg Ser Arg Ala Thr Leu Tyr Ala Leu  
165 170 175  
Ser His Ala Val Asn Asn Tyr His Lys Xaa Asn Pro Xaa Gly Thr Gln  
180 185 190  
Glu Leu Xaa Asp Ile Ala Asn Xaa Leu Met Glu Gln Ile Gln Asp Asp  
195 200 205  
Cys Xaa Gly Asp Glu Asp Tyr Thr Tyr Leu Xaa Leu Arg Xaa Ile Gly  
210 215 220  
Asn Met Gly Gln Thr Met Glu Gln Leu Thr Pro Glu Leu Lys Ser Xaa  
225 230 235 240  
Ile Leu Lys Cys Val Gln Ser Thr Lys Pro Ser Xaa Xaa Ile Gln Lys  
245 250 255  
Ala Ala Ile Gln Xaa Leu Arg Lys Met Glu Pro Lys Asp Lys Asp Gln  
260 265 270  
Xaa Xaa Leu Leu Gln Thr Phe Leu Asp Asp Ala Ser Pro Gly Asp Lys  
275 280 285  
Arg Leu Ala Ala Tyr Leu Met Leu Xaa Arg Ser Pro Ser  
290 295 300

<210> 15

<211> 335

<212> PRT

<213> Homo sapiens

<220>

<221> VARIANT

<222> (1)..(335)

<223> Wherein Xaa is any amino acid.

<400> 15

Met Gly Cys Leu Leu Phe Leu Leu Leu Trp Ala Leu Leu Gln Ala Trp  
1 5 10 15

Gly Ser Ala Glu Val Pro Gln Arg Leu Phe Pro Leu Arg Cys Leu Gln  
20 25 30

Ile Ser Ser Phe Ala Asn Ser Ser Trp Thr Arg Thr Asp Gly Leu Ala  
 35 40 45  
 Trp Leu Gly Glu Leu Gln Thr His Xaa Trp Ser Asn Asp Ser Asp Thr  
 50 55 60  
 Val Arg Xaa Xaa Lys Pro Trp Ser Gln Gly Thr Phe Ser Asp Gln Gln  
 65 70 75 80  
 Trp Glu Thr Leu Gln His Ile Phe Arg Val Tyr Arg Ser Ser Phe Thr  
 85 90 95  
 Xaa Asp Xaa Lys Glu Xaa Ala Lys Xaa Xaa Arg Leu Ser Tyr Pro Leu  
 100 105 110  
 Glu Leu Gln Xaa Ser Ala Gly Cys Glu Xaa His Pro Gly Asn Ala Ser  
 115 120 125  
 Asn Asn Phe Phe His Val Ala Phe Gln Gly Lys Asp Ile Leu Ser Phe  
 130 135 140  
 Gln Gly Thr Ser Xaa Glu Pro Xaa Gln Glu Ala Pro Xaa Trp Val Asn  
 145 150 155 160  
 Leu Ala Xaa Gln Xaa Leu Asn Gln Asp Lys Trp Thr Xaa Glu Thr Xaa  
 165 170 175  
 Gln Trp Leu Leu Asn Gly Thr Cys Pro Gln Phe Val Ser Gly Leu Leu  
 180 185 190  
 Glu Ser Gly Lys Ser Glu Leu Lys Lys Gln Val Lys Pro Lys Xaa Trp  
 195 200 205  
 Leu Ser Arg Gly Pro Xaa Pro Xaa Pro Gly Arg Leu Leu Leu Xaa Cys  
 210 215 220  
 His Val Ser Gly Xaa Tyr Pro Lys Pro Val Trp Val Lys Trp Xaa Xaa  
 225 230 235 240  
 Gly Glu Gln Glu Gln Gln Gly Thr Gln Pro Xaa Asp Xaa Xaa Pro Asn  
 245 250 255  
 Xaa Asp Glu Thr Trp Tyr Leu Arg Ala Thr Leu Xaa Val Xaa Ala Gly  
 260 265 270  
 Glu Ala Xaa Gly Leu Ser Cys Arg Val Lys His Ser Ser Leu Xaa Gly  
 275 280 285  
 Gln Asp Ile Val Leu Tyr Trp Gly Gly Ser Tyr Thr Ser Met Gly Leu  
 290 295 300  
 Ile Ala Leu Ala Val Leu Ala Cys Leu Leu Phe Leu Leu Ile Val Gly  
 305 310 315 320  
 Phe Thr Ser Arg Phe Lys Arg Gln Thr Ser Tyr Gln Gly Val Leu  
 325 330 335



<210> 16  
 <211> 335  
 <212> PRT  
 <213> Homo sapiens

<220>  
 <221> VARIANT  
 <222> (1)..(335)  
 <223> Wherein Xaa is any amino acid.

<400> 16  
 Met Gly Cys Leu Leu Phe Leu Leu Leu Trp Ala Leu Leu Gln Ala Trp  
   1                  5                  10                  15  
 Gly Ser Ala Glu Val Pro Gln Arg Leu Phe Pro Leu Arg Cys Leu Gln  
                   20                  25                  30  
 Ile Ser Ser Phe Ala Asn Ser Ser Trp Thr Xaa Thr Asp Gly Leu Ala  
           35                  40                  45  
 Xaa Leu Gly Glu Leu Gln Thr His Ser Trp Ser Xaa Asp Ser Asp Thr  
   50                  55                  60  
 Xaa Xaa Xaa Leu Lys Pro Trp Ser Gln Gly Thr Phe Ser Xaa Gln Xaa  
   65                  70                  75                  80  
 Trp Glu Thr Leu Xaa His Ile Phe Xaa Xaa Tyr Arg Ser Ser Phe Thr  
                   85                  90                  95  
 Arg Asp Val Lys Glu Phe Ala Lys Xaa Leu Arg Leu Ser Tyr Pro Xaa  
           100                  105                  110  
 Glu Leu Gln Xaa Xaa Ala Gly Cys Glu Val His Pro Gly Xaa Ala Ser  
   115                  120                  125  
 Asn Asn Phe Phe His Xaa Ala Xaa Gln Gly Xaa Asp Ile Leu Ser Phe  
   130                  135                  140  
 Gln Gly Thr Ser Trp Glu Pro Thr Gln Glu Ala Pro Xaa Trp Val Asn  
   145                  150                  155                  160  
 Leu Ala Ile Gln Xaa Leu Asn Gln Asp Lys Trp Thr Arg Xaa Thr Val  
                   165                  170                  175  
 Gln Trp Leu Leu Asn Gly Thr Cys Pro Gln Phe Val Ser Gly Leu Leu  
           180                  185                  190  
 Glu Xaa Gly Lys Xaa Glu Leu Lys Lys Gln Xaa Lys Pro Lys Ala Xaa  
   195                  200                  205  
 Leu Ser Arg Gly Pro Ser Pro Gly Pro Gly Arg Leu Leu Leu Val Cys  
   210                  215                  220  
 His Val Xaa Gly Phe Tyr Pro Lys Pro Val Trp Xaa Lys Trp Xaa Arg  
   225                  230                  235                  240

Gly	Glu	Gln	Glu	Gln	Gln	Gly	Thr	Gln	Pro	Gly	Asp	Ile	Leu	Pro	Asn	
				245					250					255		
Xaa	Asp	Glu	Thr	Trp	Tyr	Leu	Arg	Ala	Thr	Leu	Asp	Xaa	Xaa	Ala	Gly	
			260					265					270			
Glu	Ala	Ala	Gly	Leu	Xaa	Cys	Arg	Val	Lys	His	Ser	Ser	Leu	Glu	Gly	
		275					280					285				
Gln	Xaa	Xaa	Xaa	Leu	Tyr	Trp	Gly	Gly	Ser	Tyr	Thr	Ser	Met	Gly	Leu	
	290					295					300					
Ile	Ala	Leu	Ala	Val	Leu	Ala	Cys	Leu	Xaa	Phe	Leu	Leu	Ile	Val	Gly	
305					310					315					320	
Phe	Thr	Ser	Arg	Phe	Lys	Arg	Gln	Thr	Ser	Tyr	Gln	Gly	Val	Leu		
				325					330					335		